

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 10313896 A

(43) Date of publication of  
application: 02. 12 . 98

(51) Int. Cl      C12Q 1/37  
                  // C07K 5/103  
                  C07K 5/11  
                  C07K 7/06

(21) Application number: 09126087

(22) Date of filing: 15 . 05 . 97

(71) Applicant: YAMANOUCHI PHARMACEUT  
CO LTD

(72) Inventor: KANO HIROYUKI  
SHIMIZU YASUAKI  
KATO MASAO  
SAITO SHIGEKI  
MATSUMOTO SHUNICHIRO  
AIBE KAZUHIKO

(54) NEW SYNTHETIC SUBSTRATE FOR  
MEASUREMENT OF ACTIVITY HAVING  
CHROMOPHORE OR FLUOROPHORE TO  
MATRIX METALLOPROTEASE

(57) Abstract:

PROBLEM TO BE SOLVED: To obtain a new synthetic substrate necessary for screening of a matrix metalloprotease (MMP) inhibitor and suitable for rapid, simple and highly sensitive MMP assay system, etc., capable of carrying out multi-treatment by including a specific chemical structure.

Suc-Lys-Pro-Leu-Gly-Leu- Phe-Ala-Arg-MCA  
(MCA is 4-methyl-coumarin-7-yl-amide). Furthermore, activity of MMP and MMP containing double digesting process by aminopeptidase are preferably measured by using the synthetic substrate. The synthetic substrate is obtained by reacting, e.g. a compound of formula II with a compound of formula III in the presence of a condensing agent and then deprotecting the resultant reaction product.

COPYRIGHT: (C)1998,JPO

SOLUTION: This compound is represented by formula I [Z is a protective group of N terminal; Y is a chromophor or a fluorophore; B is a peptide residue containing one or more amino acid residues hardly ingested with aminopeptidase; C is a peptide residue comprising an amino acid residue other than the amino acid residues hardly ingested with aminopeptidase], e.g.

BEST AVAILABLE COPY

BEST AVAILABLE COPY

